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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,146	07/26/2001	Richard A.A. Heylen	204	8208

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PATENT DEPARTMENT  
MACROVISION CORPORATION  
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SANTA CLARA, CA 95050

EXAMINER

SCHUBERT, KEVIN R

ART UNIT PAPER NUMBER

2137

DATE MAILED: 08/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/916,146

Applicant(s)

HEYLEN, RICHARD A.A.

Examiner

Kevin Schubert

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 8/9/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2,3,5-7,9,10,12,14-16,18,19,30 and 31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,3,5-7,9,10,12,14-16,18,19,30 and 31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>20060809; 20060526</u> . | 6) <input type="checkbox"/> Other: _____  |

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### DETAILED ACTION

Claims 2-3,5-7,9-10,12,14-16,18-19, and 30-31 have been considered.

#### *Claim Rejections - 35 USC § 103*

5           The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

10           (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15           Claims 3,5-7,9,12,14-16,18-19, and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hogan, U.S. Patent No. 5,699,434, in view of Maenza, U.S. Patent No. 6,076,165.

As per claims 30-31, the applicant describes a method comprising the following limitations which are met by Hogan in view of Maenza:

20           a) providing data patterns on the disc arranged such that the disc patterns cannot be accurately copied onto another disc by a writer for recordable discs which has a limited ability to look ahead during encoding, wherein the data patterns have a DSV (digital sum value) which has a rapid rate of change over time wherein the transition in the EFM (eight to fourteen modulation) signal from the data patterns are shifted from their ideal values or the ability of disc drives to maintain optimal head positioning is compromised (Hogan: Col 3, lines 48-60; Col 5, line 64 to Col 6, line 41; Figs 3A,3B,3C,3D);

25           b) the data patterns making up an authentication signature (Hogan: Col 3, lines 48-60; Col 5, line 64 to Col 6, line 41; Figs 3A,3B,3C,3D);

c) wherein the data patterns of the authenticating signature and other data are applied to the optical disc in a mastering process using a laser beam recorder controlled by an encoder which has a larger ability to look ahead than the writer and thus can be controlled to accurately write the

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authenticating signature to the disc (Hogan: Col 3, lines 48-60; Col 5, line 64 to Col 6, line 41; Figs 3A, 3B, 3C, 3D; Maenza: abstract).

Hogan teaches all the limitations of the above claim, except in Hogan it is unclear whether the authentication techniques may be used in a mastering process. Maenze teaches employing  
5 authentication techniques in a mastering process. More specifically, Maenza teaches writing data patterns making up an authenticating signature to a disc in a mastering process, whereby the data patterns making up the authenticating signature cannot be accurately copied to another disc using standard equipment. In so doing, security of data in the mastering process is maintained. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of  
10 Maenze with those of Hogan because doing so allows security of data in a mastering process.

As per claim 3, the applicant describes the method of claim 30, which is met by Hogan in view of Maenza, with the following limitation which is also met by Hogan:

Wherein successful operation of the copy protected disc requires that the disc be present in the  
15 drive and that a correct authenticating signature be readable therefrom (Hogan: Fig 1; Col 4, lines 18-21).

As per claims 5 and 14, the applicant describes the method of claims 30-31, which are met by Hogan in view of Maenza, with the following limitation which is also met by Hogan:

Wherein the provided data patterns additionally to the rapid rate of change ensure that the DSV  
20 has an absolute value significantly greater than usual (Hogan: Col 3, lines 43-47).

As per claims 6 and 15, the applicant describes the method of claims 30-31, which are met by Hogan in view of Maenza, with the following limitation which is also met by Hogan:

Wherein the provided data patterns are repeated patterns of values (Hogan: Fig 3A, 3B, Col 3,  
25 lines 48-59).

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As per claims 7 and 16, the applicant describes the method of claims 30-31, which are met by Hogan in view of Maenza, with the following limitation which is also met by Hogan:

Wherein the size of the provided data patterns is predetermined (Hogan: Col 6, lines 42-49).

5 As per claims 9 and 18, the applicant describes the method of claims 30-31, which are met by Hogan in view of Maenza, with the following limitation which is also met by Hogan:

Wherein the provided data patterns arranged to produce a DSV which has a substantial low frequency component lower than that of the lowest signal frequency that does not cause DSV problems (Hogan: Col 5, lines 51-63; Fig 3B).

10

As per claim 12, the applicant describes the disc of claim 31, which is met by Hogan in view of Maenza, with the following limitation which is also met by Hogan:

Wherein the provided data patterns have a size and/or nature which ensures that they cannot be accurately written by a writer of recordable discs (Hogan: Col 3, lines 48-59; Col 1, lines 19-23).

15

As per claim 19, the applicant describes the disc of claim 31, which is met by Hogan in view of Maenza, with the following limitation which is also met by Hogan:

Wherein the data patterns are put in a plurality of sectors on the optical disc (Hogan: Col 3, lines 48-60; Col 5, line 64 to Col 6, line 41).

20

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

25

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

30

Claims 2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hogan in view of Maenza of Newman, U.S. Patent No. 6,353,890.

5           As per claim 2, the applicant describes the method of claim 30, which is met by Hogan in view of Maenza, with the following limitation:

Wherein the existence of corrupted or otherwise incorrect data in a particular sector on the optical disc signifies that that disc is not original whereby its use may be prevented (Newman: Col 10, lines 14-21);

10           Hogan in view of Maenza describes all the limitations of claim 30. However, Hogan in view of Maenza appears to fail to identify the use of corrupt or incorrect data on a particular sector to signify that the disc is not original. The errors in Hogan's system only serve to create a large DSV which inhibits copying of the disc. The errors in Newman's system serve to signify that the disc is or is not original. If the disc is not original, its use is not permitted.

15           It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Newman with those of Hogan in view of Maenza and allow for the data patterns to authenticate whether use of a disc is or is not permitted because doing this adds an additional security feature in the system.

20           As per claim 10, the applicant describes the method of claim 30, which is met by Hogan in view of Maenza, with the following limitation which is met by Newman:

Wherein the authenticating signature is also made up of sectors containing only zeros which are provided both before and after sectors containing the chosen data patterns (Newman: Col 3, lines 15-20; Col 3, lines 60-65);

25           Hogan in view of Maenza describes all the limitations of claim 30. However, Hogan in view of Maenza appears to fail to describes the use of padding sectors with zeros before and after sectors containing chosen data patterns. Newman discloses that an error free sector (containing only zeros) may

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adjoin a sector of error data patterns for ease in processing. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Newman with those of Hogan in view of Maenza and add sectors containing only zeros before and after the sectors containing data patterns because doing so makes it easier for reading devices to prove information.

5

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

10 A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of  
15 the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Schubert whose telephone number is (571) 272-4239. The examiner can normally be reached on M-F 7:30-6:00.

20 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should  
5 you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

10 KS

  
**EMMANUEL L. MOISE**  
**SUPERVISORY PATENT EXAMINER**